

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference 99 P 4055 P		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/DE00/00853	International filing date (day/month/year) 17 March 2000 (17.03.00)	Priority date (day/month/year) 19 March 1999 (19.03.99)	
International Patent Classification (IPC) or national classification and IPC H02K 1/27			
Applicant SIEMENS AKTIENGESELLSCHAFT			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 08 August 2000 (08.08.00)	Date of completion of this report 27 November 2000 (27.11.2000)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

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national application No.

PCT/DE00/00853

I. Basis of the report

1. This report has been drawn on the basis of *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.)*:

- ☐ the international application as originally filed.
- ☒ the description, pages 1-7, as originally filed,
 pages _____, filed with the demand,
 pages _____, filed with the letter of _____,
 pages _____, filed with the letter of _____.
- ☒ the claims, Nos. 1-6, as originally filed,
 Nos. _____, as amended under Article 19,
 Nos. _____, filed with the demand,
 Nos. _____, filed with the letter of _____,
 Nos. _____, filed with the letter of _____.
- ☒ the drawings, sheets/fig 1/3-3/3, as originally filed,
 sheets/fig _____, filed with the demand,
 sheets/fig _____, filed with the letter of _____,
 sheets/fig _____, filed with the letter of _____.

2. The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

4. Additional observations, if necessary:

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1 - 6	YES
	Claims		NO
Inventive step (IS)	Claims	1 - 6	YES
	Claims		NO
Industrial applicability (IA)	Claims	1 - 6	YES
	Claims		NO

2. Citations and explanations

1) Novelty

The subject matter of Claim 1 differs from the closest prior art disclosed in FR-A-2 578 116 (D1) (cf. Claim 1) in that the two adjacent half-yokes of two yokes arranged side by side are interconnected by means of end plates to form a pole element, and each pole element is fixed individually to the rotor body.

It is therefore considered to be novel.

2) Inventive step

Claim 1.

In the rotor according to document D1, all the half-yokes are connected to one another by only two end plates. This design gives rise to problems when the rotor is bulky and heavy.

The problem to be solved by the distinguishing features of Claim 1 is understood to be to design the rotor structure so that the permanent magnets can be mounted without great exertion of force (cf. the description, page 2, fourth paragraph).

.../...

(Continuation of V.2)

It is not known from the other available prior art documents to divide the rotor structure into a plurality of pole elements which can be fixed individually to the rotor body, half-yokes of adjacent yokes being interconnected in the pole elements by means of end plates.

For this reason, the rotor according to Claim 1 is not suggested by the prior art.

Claims 2 - 5 are dependent on Claim 1 and therefore the subjects of these claims are not suggested by the prior art either.

The methods described in the available prior art are not suitable for producing a rotor according to Claim 1. Consequently, the method according to Claim 6 is not suggested by the prior art either.

- 3) There are no objections concerning the industrial applicability of the claimed invention.

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VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

- 4) Pursuant to PCT Rule 6.3(b), the features which, in combination, are part of the prior art should be included in the preamble of the independent claim (cf. item 1 above). This also applies to the feature in the characterizing portion whereby each yoke, viewed in the peripheral direction, is divided into two half-yokes each extending over one-half of a pole division.
- 5) To facilitate understanding of the claims, the technical features they contain should be followed by reference signs placed between parentheses (PCT Rule 6.2(b)). This applies equally to preamble and characterizing portion.
- 6) The description did not cite document D1 or briefly outline the relevant prior art contained therein. The requirements of PCT Rule 5.1(a)(ii) are therefore not satisfied.